

District Energy Planning South Lake Union Update

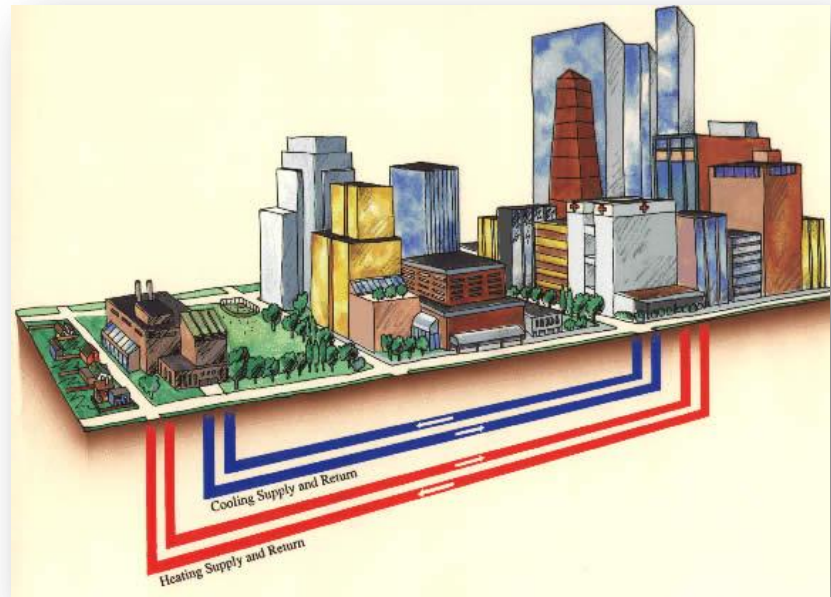
Seattle City Council
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SEATTLE OFFICE OF
Sustainability & Environment

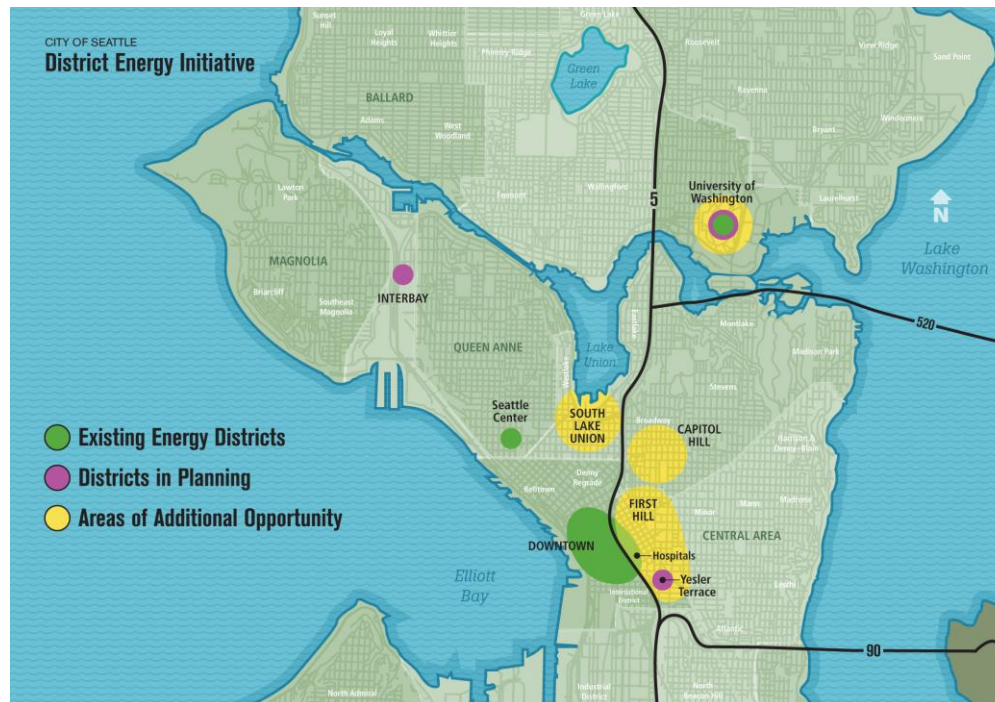
Seattle's Interest in District Energy

- ▶ **Environmental benefits**
 - ▶ Efficiency
 - ▶ Opportunity for low-carbon fuels
 - ▶ Economies of scale make more local renewable options possible
- ▶ **Economic benefits**
 - ▶ Through local energy capture/production



District Energy Planning Strategy

- Identify top priority neighborhoods
- Facilitate development of a district energy system with a private utility partner



District Energy Work in Progress

First Hill

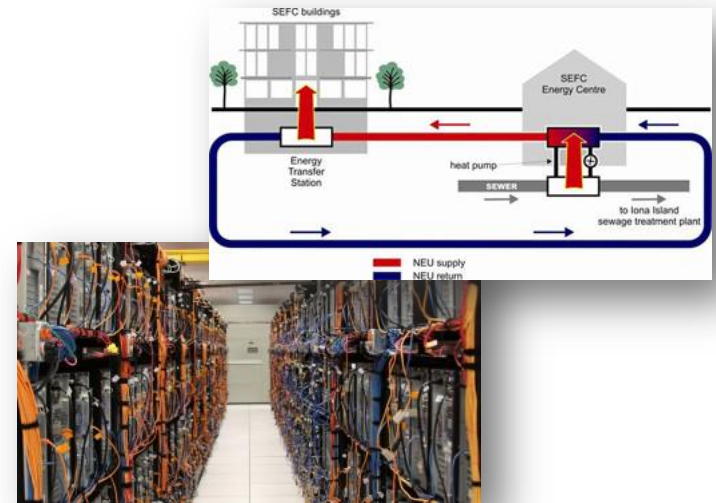


South Lake Union



South Lake Union Opportunity

- ▶ Substantial projected development, and interest in DE from developers
- ▶ Lots of waste heat available
 - ▶ Data centers, office cooling towers and sewer lines
- ▶ Potential synergies with other infrastructure projects
- ▶ Incentives for DE in the SLU Rezone
 - ▶ LEED-Gold or LEED-Silver+DE



Preliminary Vision

Central part of SLU largely redeveloped.

Still remaining opportunities, but time sensitive.

Cascade, 8th Ave. Corridor, and Lakefront most promising med-term.

Northwest less certain on when and type of development (Future opportunity)

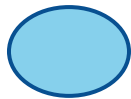
Northeast may have a few opportunities for retrofit and/or sources of waste heat (opportunistic approach).



Target zones for DE

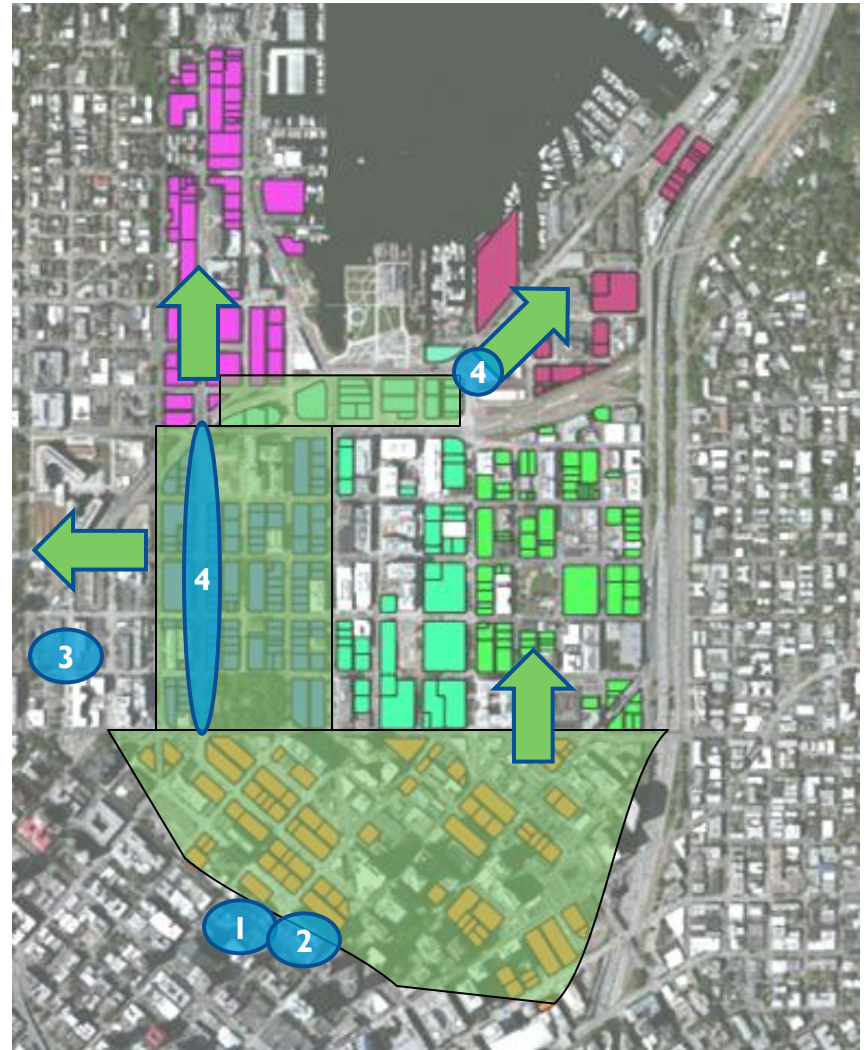


Growth Potential



Key Alternative Energy Sources

1. Westin Data Center(s)
2. Seattle Steam (biomass / peaking / polishing)
3. Fisher Data Center
4. Sewer Heat Recovery



Making District Energy a Reality

- ▶ Pace of development is fast, and we need to move quickly
- ▶ Overcoming the first capital costs
 - ▶ New LEED req't for Incentive Zoning
 - ▶ Connection credits to early customers
 - ▶ Amortizing up-front capital costs over many future customers instead of first few customers
- ▶ Clear responsibilities
 - ▶ City Leadership
 - ▶ Utility Partners
 - ▶ Customer Support



City and Partner Roles

- ▶ Partnership between:

- ▶ City
- ▶ District Energy Utilities (Corix Utilities, Seattle Steam)
- ▶ Future Customers (property developers and owners)
- ▶ Potential energy sources (King County, data center owners)

- ▶ City Roles

- ▶ Leadership
- ▶ Setting priorities and policy
- ▶ Coordination with other infrastructure projects
- ▶ Catalyzing support as needed (TBD)



Next Steps

- ▶ First decisions from early development projects on desire for DE heating/cooling over the summer
- ▶ In-depth neighborhood analysis from DE utility partners to fully map the opportunity, network and energy source options, staging, and path forward



Questions?

